

U.S. Department of Energy Advanced Research Projects Agency- Energy (ARPA-E)

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www.arpa-e.energy.gov



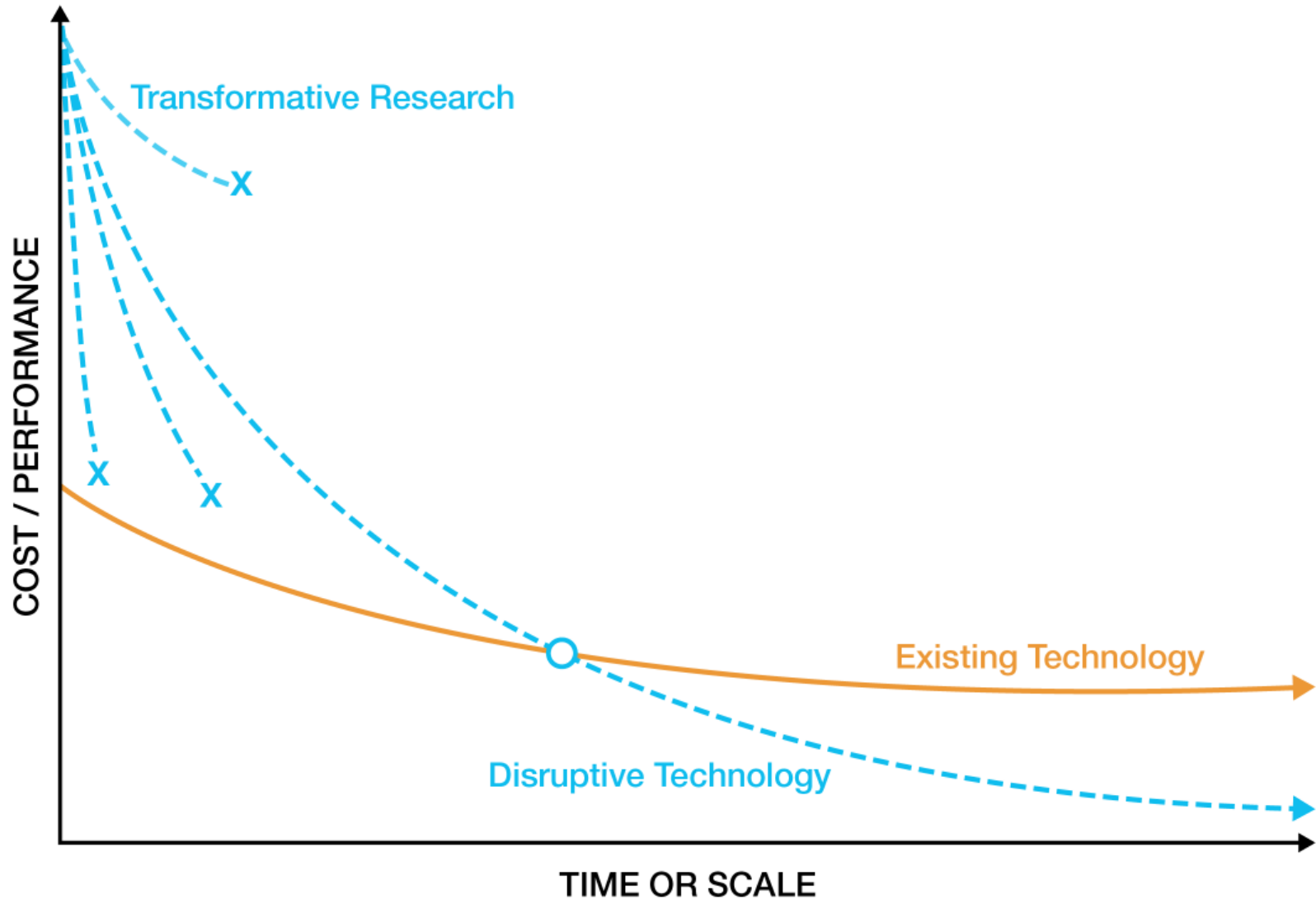
ARPA-E Mission

Mission: To overcome long-term and high-risk technological barriers in the development of energy technologies

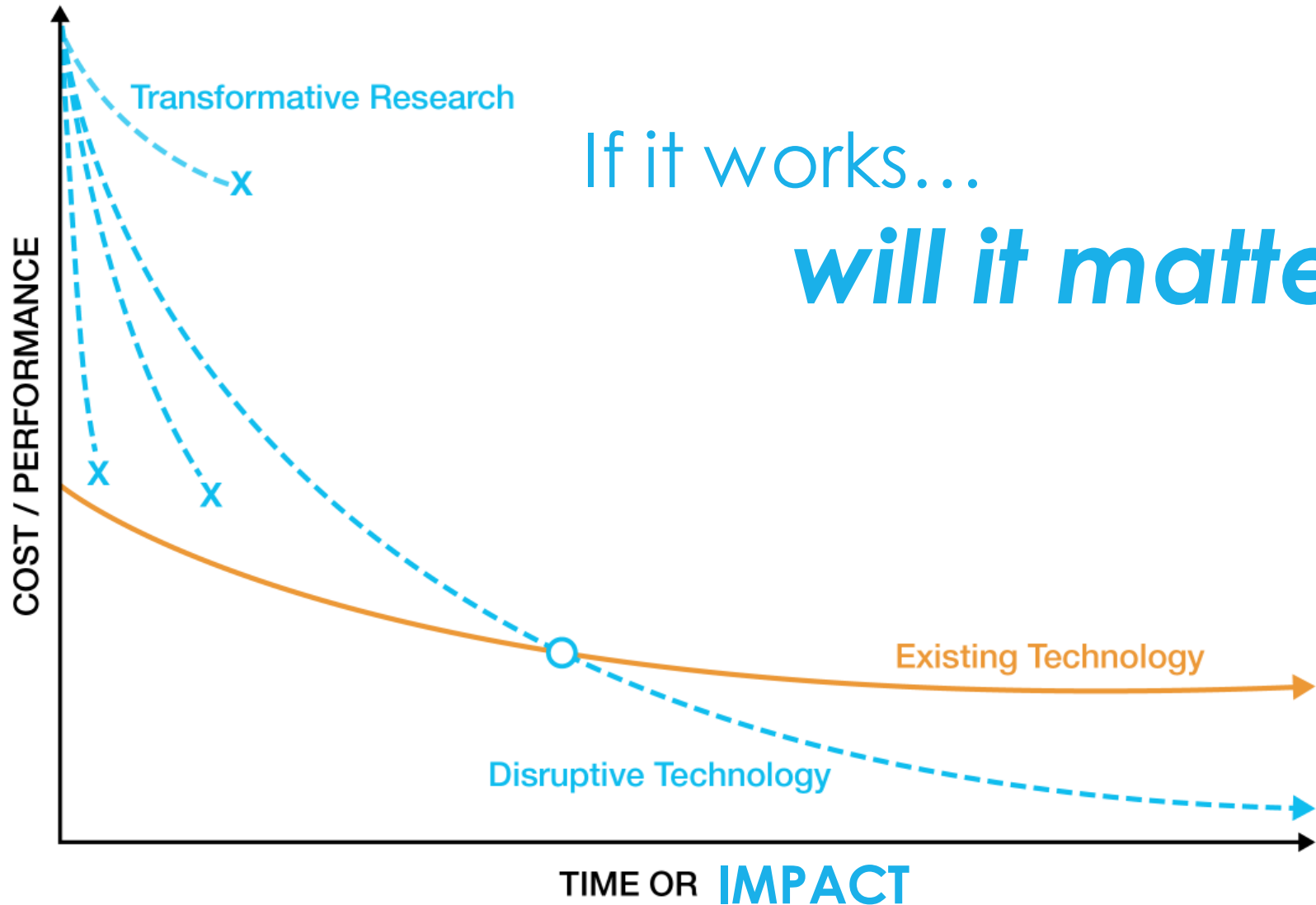
←  **Ensure U.S. Technological Lead & U.S. Economic and Energy Security** →



Creating New Learning Curves



Creating New Learning Curves

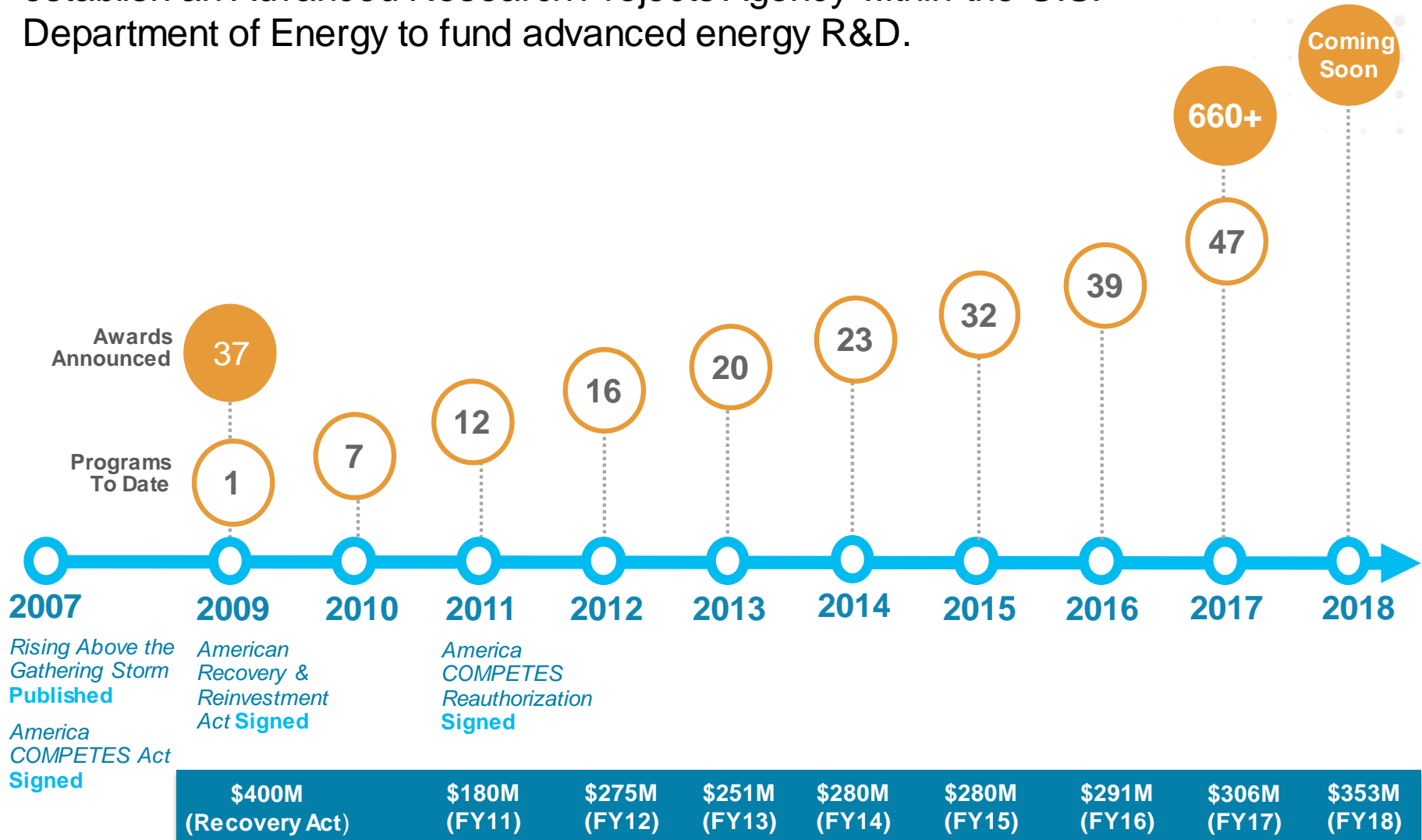


If it works...

will it matter?

ARPA-E History – we are rather young

In 2007, The National Academies recommended Congress establish an Advanced Research Projects Agency within the U.S. Department of Energy to fund advanced energy R&D.



ARPA-E : Who are we, anyway?



Program Director

- ✓ Program development
- ✓ Active project management
- ✓ Thought leadership
- ✓ Explore new technical areas

Technology-to-Market Advisor

- ✓ Business development
- ✓ Technical marketing
- ✓ Techno-economic analyses
- ✓ Stakeholder outreach

PhD Fellow

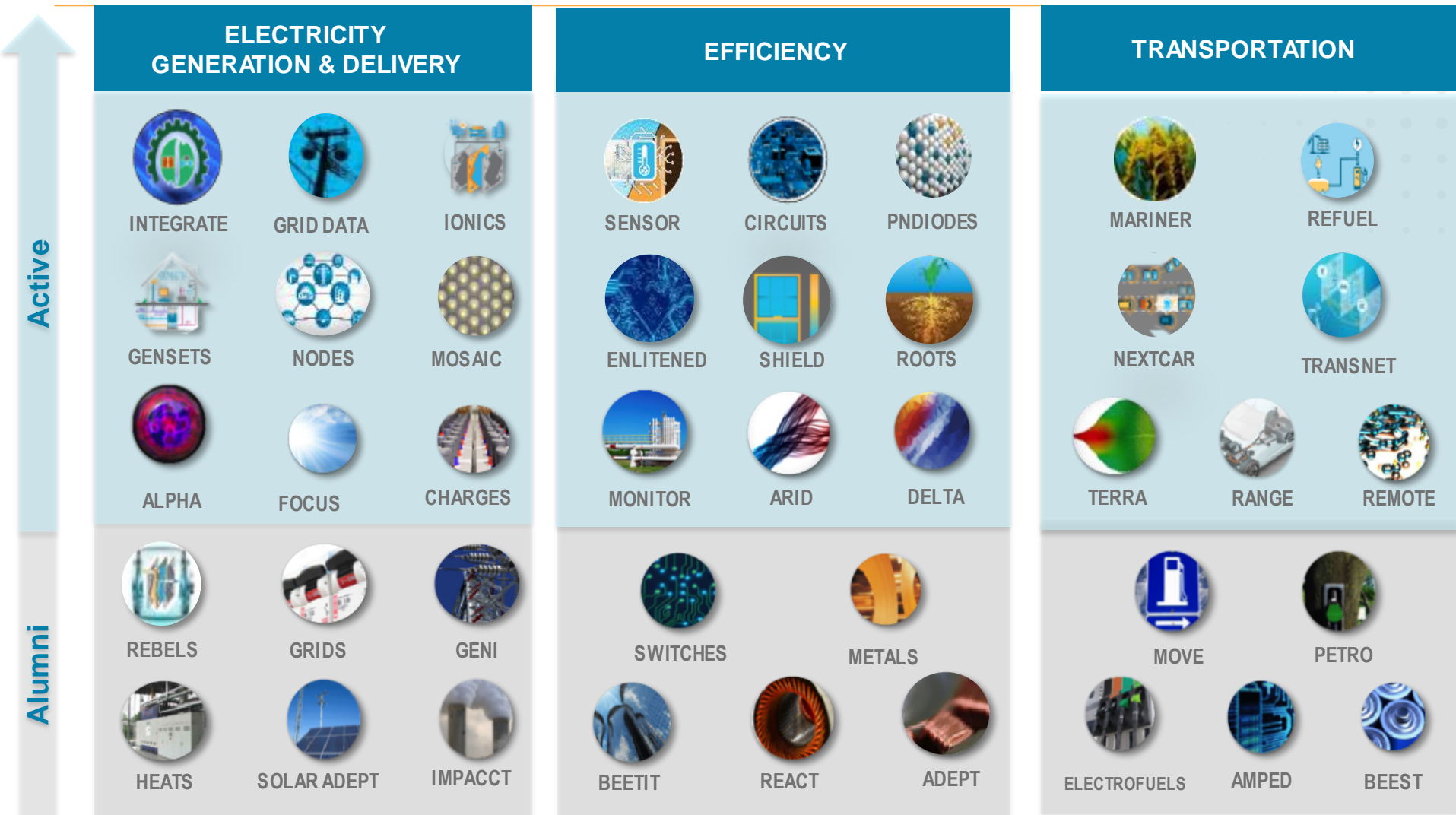
- ✓ Independent energy technology development
- ✓ Program Director support
- ✓ Organizational support



Special Hiring Authority/Term Limits
Occasional Interns, etc.

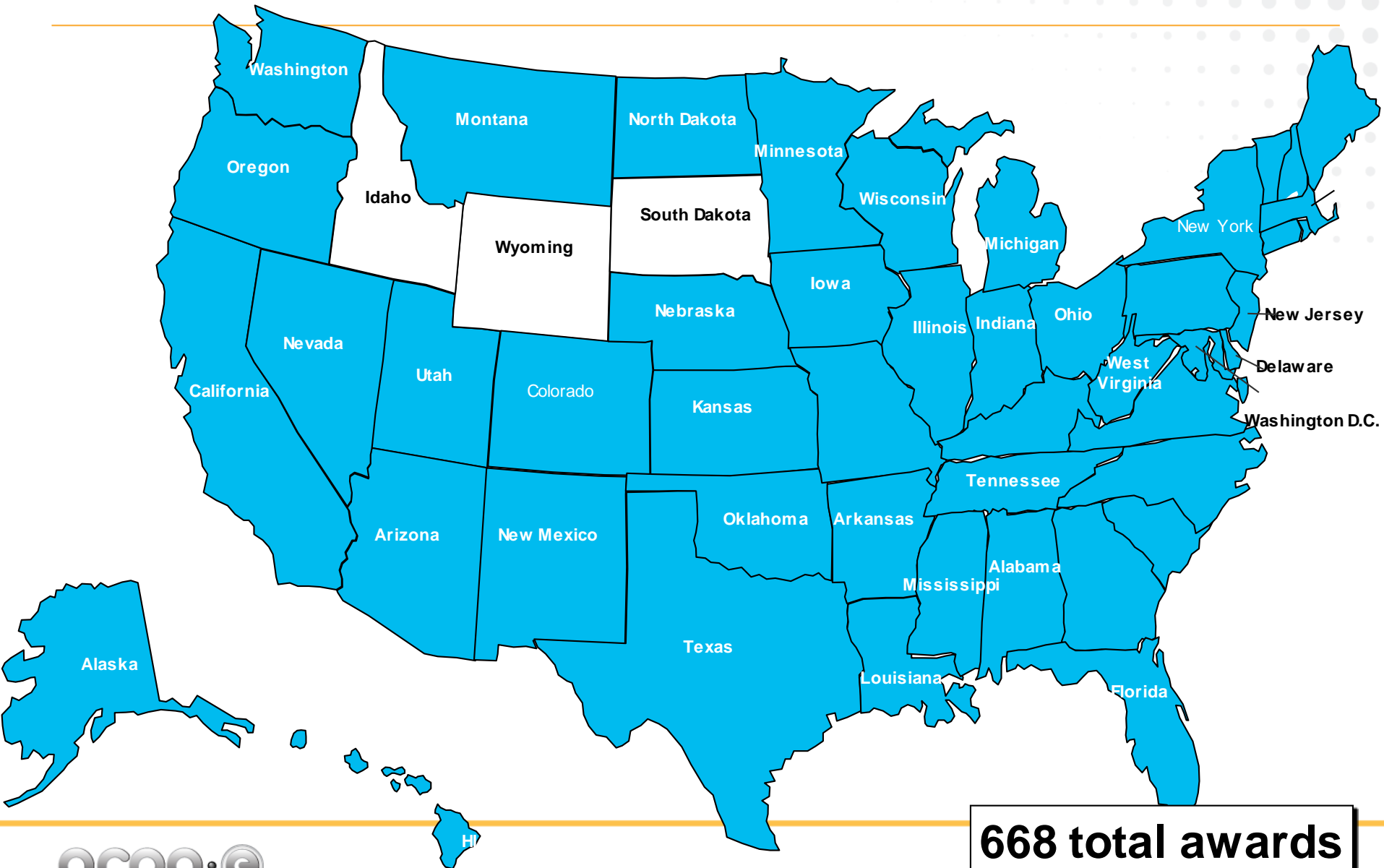
ARPA-E Summit – July in Colorado!

ARPA-E – we'll do anything *(almost)*



OPEN 2009, 2012, 2015 & 2018 Solicitations
Complement Focused Programs

Anywhere! (Almost!)



668 total awards

What Makes an ARPA-E Project?



IMPACT

- High impact on ARPA-E mission areas
- Credible path to market
- Large commercial application



TRANSFORM

- Challenges what is possible
- Disrupts existing learning curves
- Leaps beyond today's technologies



BRIDGE

- Translates science into breakthrough technology
- Not researched or funded elsewhere
- Catalyzes new interest and investment



TEAM

- Comprised of best-in-class people
- Cross-disciplinary skill sets
- Translation oriented

ARPA-E : do we matter?

Since 2009
ARPA-E has
provided

\$1.8 billion

in R&D funding to
more than **660 projects**



136 Projects have
attracted more than

\$2.6 billion

in private-sector follow-on funding



71 projects

have formed
**new
companies**



109 projects

have **partnered
with other
government
agencies**
to further
development



1,634

peer-reviewed
journal articles
from ARPA-E
projects



248 patents

issued by U.S.
Patent and
Trademark Office





U.S. DEPARTMENT OF
ENERGY

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